

JPRS 77978

1 May 1981

# China Report

POLITICAL, SOCIOLOGICAL AND MILITARY AFFAIRS

No. 188

Selections from JIEFANGJUN HUABAO, Nos 1-3, 1981



FOREIGN BROADCAST INFORMATION SERVICE

#### NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [ ] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Indexes to this report (by keyword, author, personal names, title and series) are available from Bell & Howell, Old Mansfield Road, Wooster, Ohio 44691.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

1 May 1981

CHINA REPORT  
POLITICAL, SOCIOLOGICAL AND MILITARY AFFAIRS  
No. 188

SELECTIONS FROM JIEFANGJUN HUABAO, Nos 1-3, 1981

## CONTENTS

PLA Staff Officer Outlines 1981 Training Goals.....	1
Stepping Up Coordinated Training Stressed.....	4
Bitter Cold No Match for Ardent Spirit of Missile Unit.....	13
Innovations Described.....	17
Fighters' Home Deep in the Tianshan Mountains [Zhang Yougui].....	21
Squad Practices Shoulder-Firing of Recoilless Rifle [Li Yongan, et al.].....	27
Pilots Train in Flying on Rainy Nights [Tian Dexin, et al.].....	29
Engineers Throw Pontoon Bridge Across Icebound River [Ou Dalong and Cao Dongsheng].....	34
Single-Channel Carrier Repeater Described.....	40

## MILITARY AND PUBLIC SECURITY

### PLA STAFF OFFICER OUTLINES 1981 TRAINING GOALS

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 1, 1981 p 1

[Interview with Han Huaizhi [7281 2037 2535], assistant to the chief of the general staff, by staff correspondent on this year's military training: "Place Training Emphasis on Combat Readiness"]

[Text] Question: A new annual training cycle is about to begin. What should the emphasis be in guiding the thinking for this year's military training?

Answer: Combat readiness is our army's basic function. All the work of the armed forces must be based on combat readiness, and the aim of military training is combat readiness. Therefore, combat readiness is the most fundamental guiding thought in military training. In order to prepare well for a war against aggression, the training must, in line with the strategic policy and guiding thought on war determined by the Military Commission of the CCP Central Committee, we must focus on the target of our operations and the features of the war zone and do research on solving strategic and tactical problems of a people's war under modern conditions, and, in particular, based on the equipment now available, stress research on new tactics on how to defeat, with our inferior equipment, an enemy with superior equipment. We must prepare to fight both a conventional war and a nuclear war.

Question: What are the key points to be grasped in the current military training?

Answer: With regard to the training objective, cadres are a key point. In peacetime, cadres are the ones who organize training; in wartime, they are the ones who command operations. The level of their modernization in military affairs and the strength of their command capability have a direct effect on the combat effectiveness of our armed forces. Therefore, training cadres is the key point of our entire training. With regard to the training content, the key point is to train our armed forces to attack tanks, aircraft and airborne forces, and in particular to give prominence to attacking tanks. At the same time, we must strengthen training in defending against atomic, chemical and biological weapons, as well as training in close combat and night combat. Each unit must determine its key points for training according

to its own mission and the actual conditions in its ground, sea or air region and in line with its area and mission. In order to heighten the focus of its training, it should also make the study of the target of our operations an important topic in the training.

Question: Each unit is now paying a great deal of attention to the study of coordinated fighting. Why is there emphasis on this question?

Answer: Modern warfare is three-dimensional warfare, combined arms warfare. To possess a high capability for coordinated fighting is an objective requirement of modern warfare and is also a significant indicator of the armed forces' modernization. Our army is a combined arms force composed of all service arms and specialized units. In case war breaks out, the enemy can only be defeated if we closely coordinate the fighting of all service arms and deploy all their power. Therefore, we must pay serious attention to the study of coordinated fighting in order to solve the problem of arranging and combining units, raising the training to an even higher level.

Question: How should we correctly understand the relationships between basic training and applied training, between separate training and combined training?

Answer: Basic training and applied training, separate training and combined training supplement each other and are interrelated, and if one is lacking there is no whole. Basic training is the prerequisite for applied training, and applied training is the development and improvement of basic training. First basic training and then advanced training, proceeding in an orderly way and step by step and making gradual improvements--this is the objective law of military training. Combined training is the highest stage of military training, the synthesis of tactical, technical and specialized training and the principal training measure for combining all service arms. In grasping basic training, we must view it from the angle of applied training; in grasping applied training, we must pay attention to consolidating and improving basic skills. Only on the basis of a good foundation and training in coordinated fighting can we combine all service arms into a strong fighting whole.

Question: What is your view on training reform? How should training be reformed?

Answer: The building of modern armed forces and the military operations under modern conditions raises many new problems and makes many new demands on our army's training. The starting point of our training reform should be focused, with regard to the target of operations, on new viewpoints and new features of combat under modern conditions, and on applying the standpoint, viewpoints, and methods of Mao Zedong's military thought, carrying out the reform of training in the aspects of system of organization, content, methods and system. This reform will include both a reform of everything that is not suitable for warfare under modern conditions and a restoration and upholding of those ways of doing things that practice has proven to be good. The training reform must stress substantial results, meet the demands of actual warfare, and lead to

the improvement of training results. Making war is a science. We must promote the scientific nature and lessen the blindness in any reform, adopting positive and reliable methods. Results of the reform must be tested again and again, and when one of them is ripe it must be popularized.

Question: What other problems in current training must we pay attention to?

Answer: The overall demand is to further strengthen training work, improve training work and truly put military training in a strategic position. Concretely speaking, we must first of all improve understanding and grasp training as the central work. The leading cadres must both take command and go out on expeditions, personally investigating and studying, leading the way in conducting tests at selected points, and thereby truly exercising their right to speak and their leadership in training. Second, we must scientifically arrange training plans so that all military jobs and professions and each subject's content can be developed in a planned and proportionate manner. Third, we must, strictly in accord with the demands of actual warfare, conduct training in a down-to-earth manner, comprehensively training the units in technology, tactics, work style, and discipline. Fourth, by conscientiously doing good political work in training, fully bringing into play the cadres' and fighters' initiative, enthusiasm and creativity for training well, the quality of training will improve. Fifth, we must be hardworking and thrifty in military training, and, under present conditions, make training adequate, study how to improve all sorts of training equipment, use self-made, simple and easily substituted equipment, use simulated equipment, and launch activities of slide projector education and education with electrical audio-visual aids.

CSO: 4005/557

## MILITARY AND PUBLIC SECURITY

### STEPPING UP COORDINATED TRAINING STRESSED

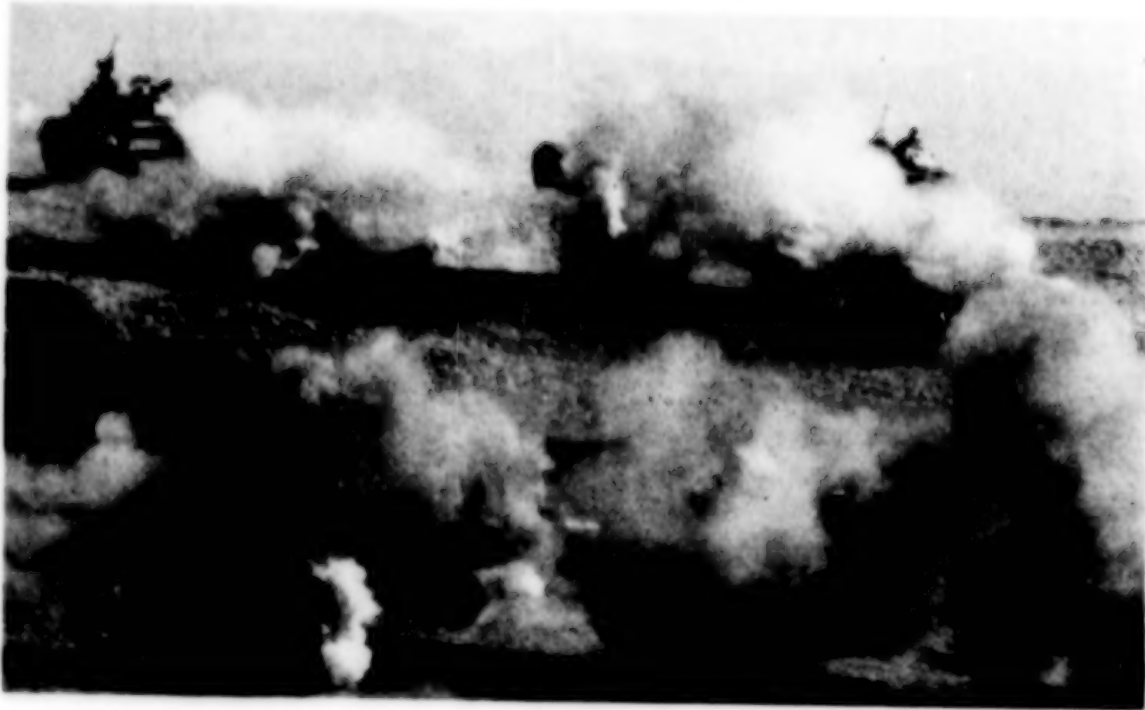
Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 1, 1981  
pp 2-5

[Article: "Step Up Coordinated Training, Bring All the Forces Into Play"]

[Text] Editor's Note: Warfare under modern conditions is three-dimensional. Coordinating the operations of combined service arms and fully bringing all the forces into play is the key issue to achieving victory in battle and combat. To step up coordinated training and improve coordinated combat capabilities of the various service arms is a crucial issue that military training at present must urgently study and resolve. Under the guidance of the upper levels, an unidentified unit of the Wuhan Units has, in accordance with the characteristics of a future war, come to grips with several problems in offensive combat and devised a number of coordinated training methods that is suited to the unit's existing equipment, for which successful results have been achieved.

#### Coordinated Operations To Open a Passage

Opening a passage is the key to offensive combat. Under modern conditions, to deal with the enemy's obstructions is the joint effort of various service arms. In order to effectively achieve the success of opening a passage, it is necessary to carefully organize the coordinated operations of the service arms, take advantage of favorable conditions and avoid unfavorable ones, divide the tasks in a clear-cut way and fully bring all the forces into play.



Our artillery forces put out a barrage of firepower against the "enemy's" forward position armored targets to open a passage



Using rocket blasters to open a passage in the obstructed areas



(3)

Caption 3. Barrier-clearing units find and remove remaining antitank mines along the passage

Caption 4. Taking direct aim with artillery fire to provide cover for barrier-clearing units to remove mines



(4)



Tanks leading infantry forces through the passage to launch an attack against the "enemy"

### Swift Maneuvers, Beat Back the 'Enemy'

To beat back an enemy's counterattack, it is necessary, by directing attention to his characteristics and our own operations and by coordinating a fleeting opportunity, to always bear in mind the word "swiftness," be quick to ascertain the enemy's situation, be prompt in making decisions, simultaneously engage in combat and set up coordinated actions, link up forces at all distances, combine attacking, bombing and blocking operations and not miss an opportunity to beat back the enemy.



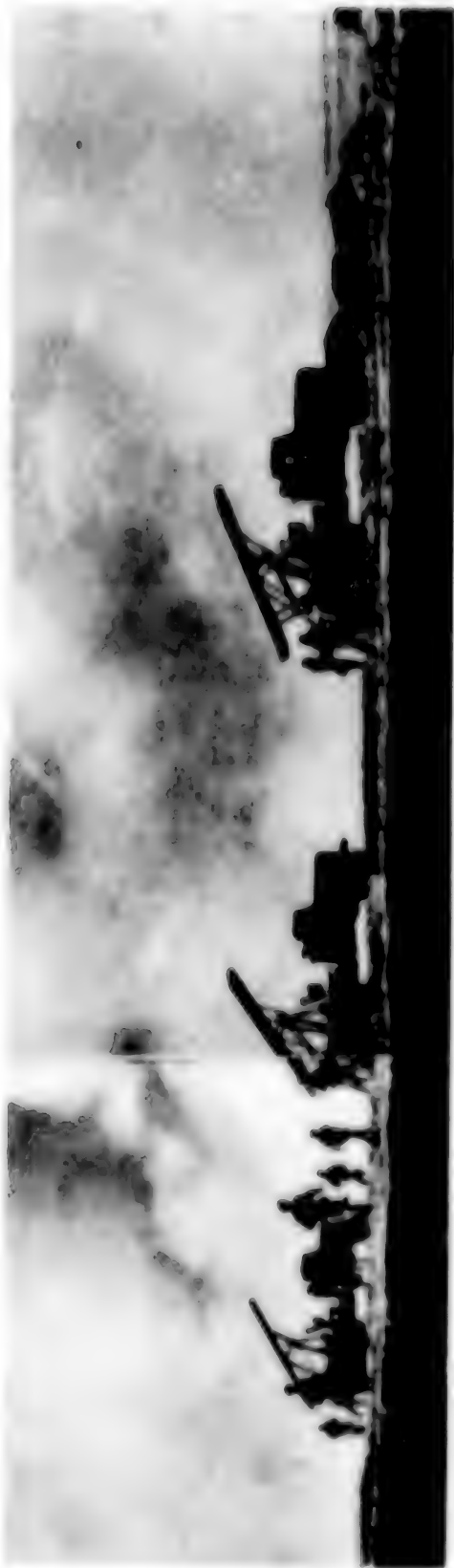
Soldiers with 40mm grenade launchers use terrain features to attack "enemy" tanks



Swiftly maneuvering close to the "enemy" to open fire with an 82mm recoilless gun



Signalman at all times provides assurance to the commander's organization and command



(a)

Caption a. Rocket mine-laying vehicles take up positions to get ready to swiftly carry out mine-laying operations



(b)

Caption b. Tanks advancing and getting set up simultaneously to swiftly launch a surprise attack against the counterattacking "enemy"



Launching an awesome fire attack on the "enemy's" flank with 85mm artillery guns

## MILITARY AND PUBLIC SECURITY

### BITTER COLD NO MATCH FOR ARDENT SPIRIT OF MISSILE UNIT

Beijing JIEFANGJUN HUABAO (LIBERATION ARMY PICTORIAL) in Chinese No 1, 1981  
pp 6-7

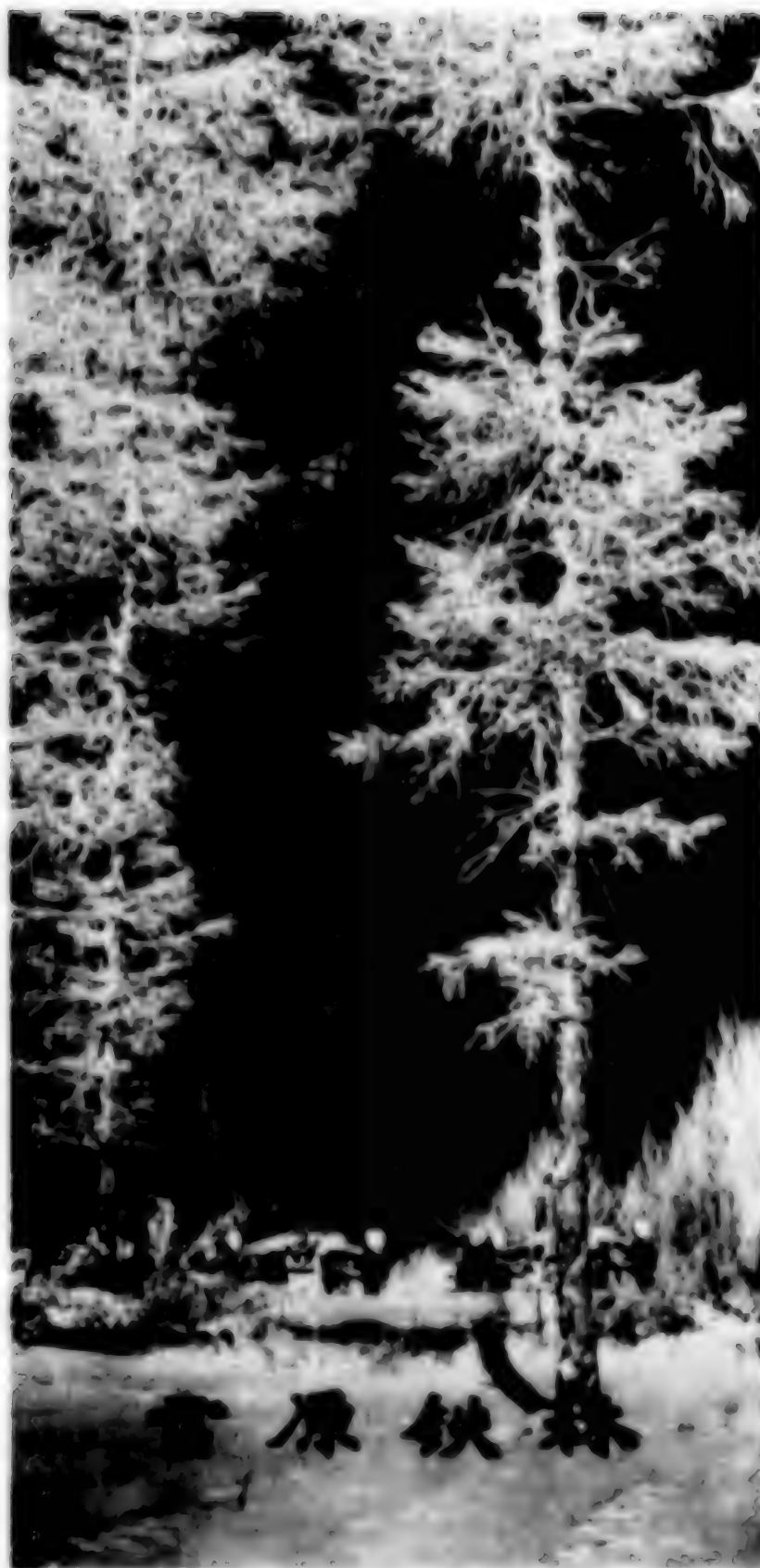
[Poem: "Snowfield Forest of Steel"]

[Text] When silver flowers on the northern border bloom everywhere in  
the dense forests and snowfield,  
The fighters even more vigilantly guard the motherland's sky;  
Those tracks in the snow,  
Are iron pledges to oppose hegemonism!

To train, what is there to fear that the weather is cold and the ground frozen,  
Because raging flames burn in the hearts of the fighters;  
Surging heatwaves turn back the Siberian cold wave,  
Large numbers of guided missiles are like swallows harbingering spring!

In war preparedness, who is afraid of lofty mountains and wide waters,  
The rapid shift in focus has drawn tight the bowstring of war preparedness;  
From whatever direction enemy aircraft come we will direct our attack in  
that direction,  
All the way to the remote edge of the Milky Way!

Oh, another stretch of forest is added to the motherland's snowfield,  
A forest of steel like towering pillars!  
Oh, the bitter winter of the northern part of the country is filled with the  
boundless sights and sounds of spring,  
Those green uniforms and red insignia on the caps are the green and red colors  
welcoming spring!



Conducting a training exercise in the bitter cold



Making a comprehensive check



Firming a graded platform



Safeguarding the radar

CSO: 4005/557

## MILITARY AND PUBLIC SECURITY

### INNOVATIONS DESCRIBED

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 1, 1981  
pp 8, 9

[Column: "Innovations"]

[Text] Rocket Blaster

The rocket blaster successfully developed by the joint efforts of a certain research institute of the Engineering Corps and various factory units is made up of a rocket, explosive part and a launcher. It can be used to open a passage for infantry units when they are obstructed by such things as (wire meshes and mine fields).



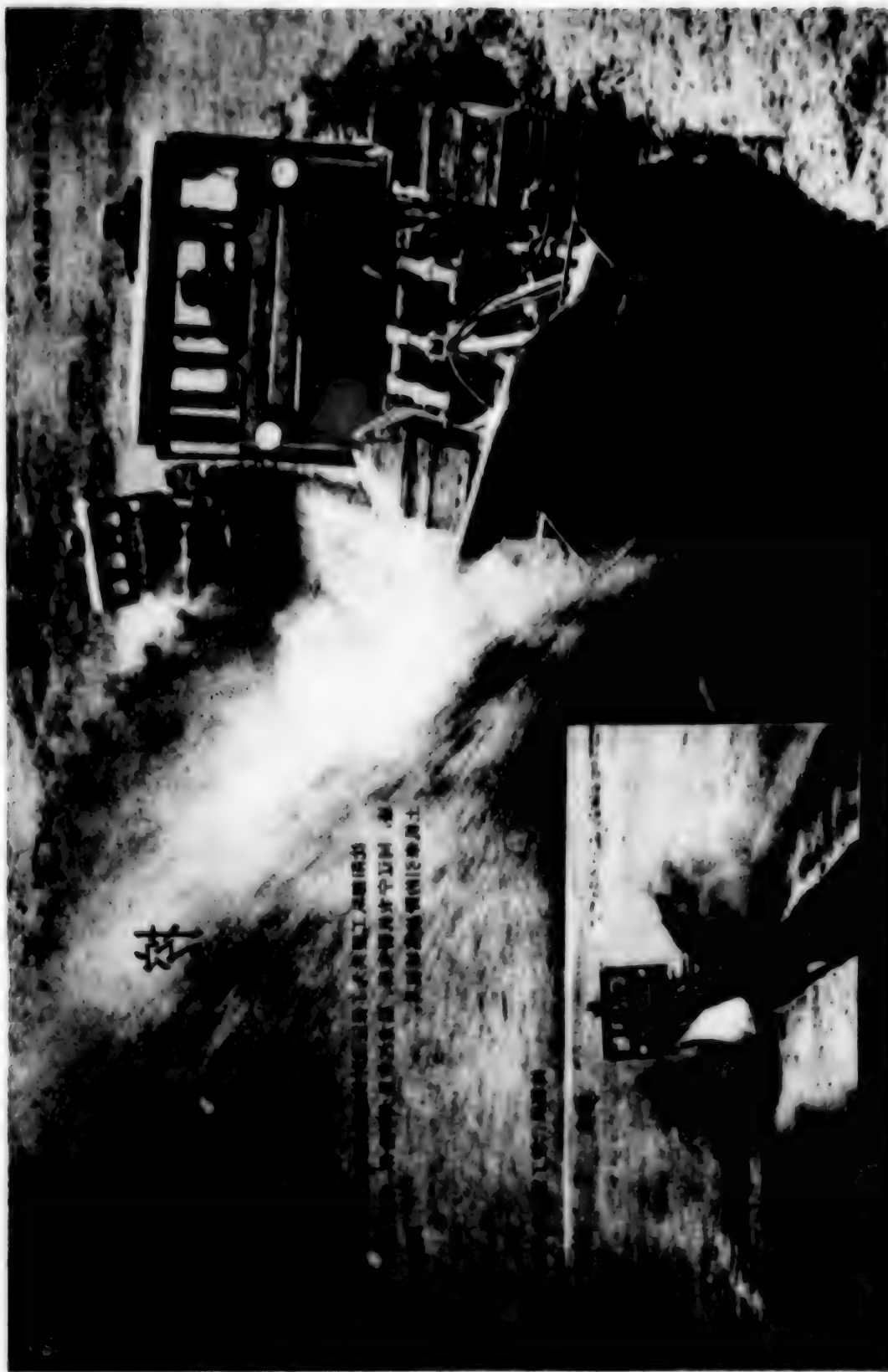
# 火箭爆破器

此器係由本研究所及工廠專家共同研製成功其構造簡單，使用  
大簡單，戰鬥部由實物製成，能在多目標物（房屋、樹木等）中  
開通路。  
王德清攝

Caption 1. The rocket blaster is easy to set up and easy to carry about  
Caption 2. The rocket blaster's simply constructed launcher  
Caption 3. The rocket blaster's warhead flies towards its target  
Caption 4. The passage opened by the rocket blaster

#### Trench Digger

In order to insure the rapid digging of antitank trenches and (transportation) trenches, the Engineering Corps of the Shenyang Units worked together with the Liaoning Farm Machinery Research Institute and the Heilongjiang Farmland Reclamation College to develop two types of bulldozer-towed field operations construction equipment.



Caption 1. Antitank trench diggers in operation

Caption 2. Trench diggers have replaced strenuous physical labor

FIGHTERS' HOME DEEP IN THE TIANSHAN MOUNTAINS

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 2, 1981  
pp 28, 29

[Article by Zhang Yougui]

[Text] Through the window, drifting clouds and stars,  
Outside the door, glacial peaks and snow mountains.  
We've set up our home on the Tianshan peaks,  
We safeguard 10,000 li of distant skies....

This is the way a poet described the life of the frontier radar troops. When we arrived at the Tianshan radar unit, the scene described by the poet unfolded before our eyes: The Tuo-mu-er Peak rose straight into the clouds and the upright antennas between the snow-white mountain peaks were like the snow lotus in full bloom.

We reached the 4th radar company, the first place we would be visiting, after crossing glaciers and snow-filled gorges. The first thing Company Commander Tao Yiyao [7118 0110 1031] said when he saw us was, "You've had a tough go of it. You'll be at home here!"

"At home!" What touching and deeply felt words! The cadres and fighters of the 4th company had come from more than a dozen provinces and cities in the motherland, and each and everyone of them had had a warm home. Coming from everywhere, they were now gathered on the border and had pitched camp deep in the Tianshan. The cadres and fighters like one another very much and are as close as family members. For example, take Wang He [3769 0735], political officer of the 7th company. When he first came here as a fighter, the company commander and political officer took care of him like an older brother because Wang He was small and weak. During the height of summer, he always had fruits and melons at his bed side; during severe cold, his bunk had an extra sheepskin coat. The same is true now that he is political officer. He has even more in common with the fighters. The day we came to visit the company, there was a rookie in bed with a cold. At suppertime, Political Officer Wang personally brought him the fragrant special food for patients. Some of the new soldiers said, At home we had fathers and mothers to look after us. After coming to the frontier, we never thought it would be a warmer place than home.

This type of deep affection, to use the words of the fighters, can provide enthusiasm for one's work and strength to fight the enemy. And that is just the way it is. One evening, a strong wind suddenly came up and the 2d company's antenna was in danger of being blown down the mountainside. The cadres and fighters braved the howling winds and formed a chain by holding hands as they climbed to the site. The entire company worked as one to pull the antenna stays tight and steady the radar vehicle, with everyone heedless of his personal safety.

Life on the frontiers is hard, but it steels the determination of the fighters and they have a deep understanding of the heavy tasks they shoulder. When their family members and the elders in their hometowns go to sleep at night, the radar antennas keep rotating as usual. Recently, when Xiong Chengfu, head of the operations squad, was on duty, a dot of light suddenly appeared on the fluorescent screen. He quickly found among the echoes from the complicated topographical features that it was the trace of a low-flying enemy plane. No matter how cunningly the enemy plane appeared and disappeared, it could not escape the eye of the hunter.

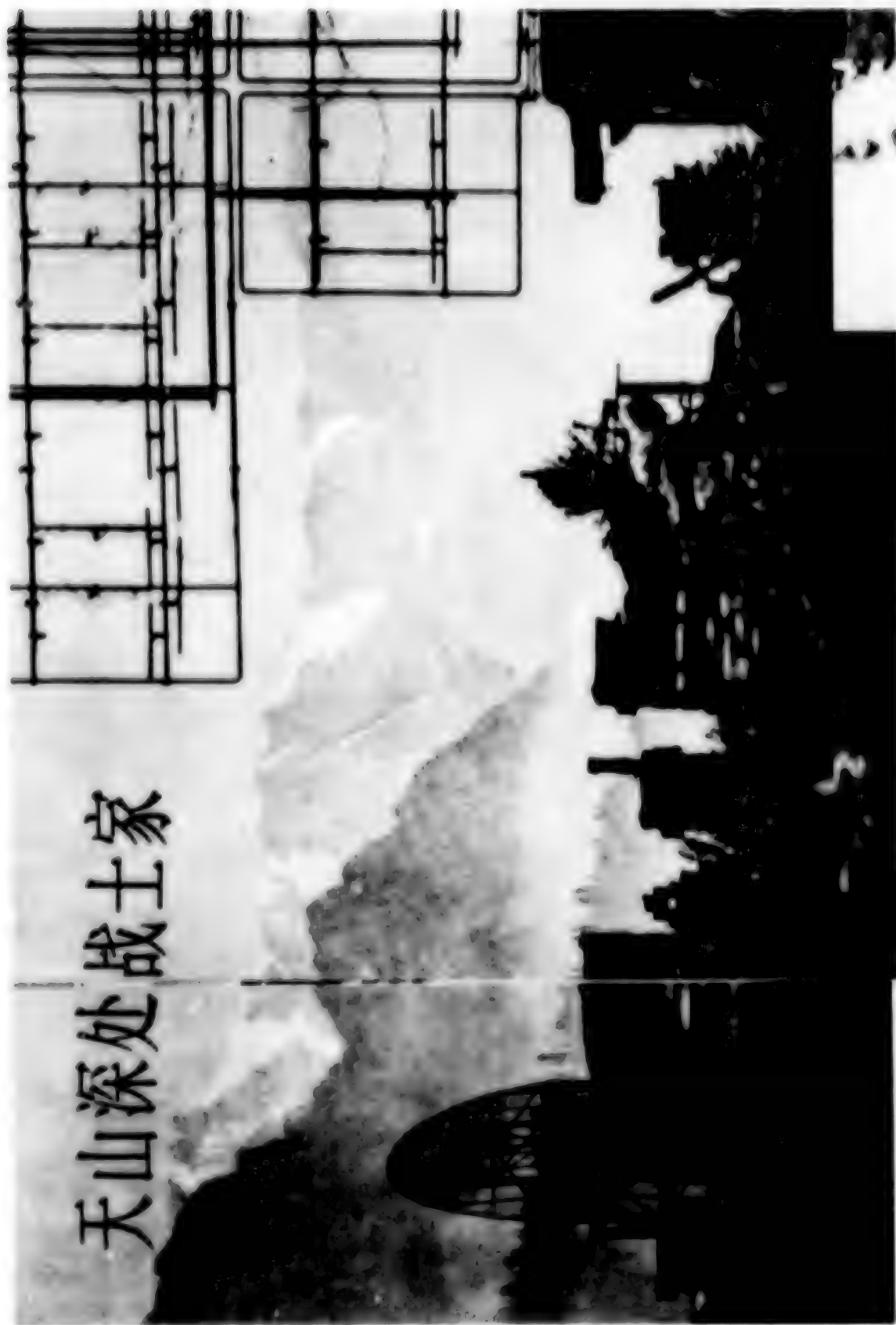
These "1,000-11 eyes" of the motherland, the radar troops of the frontier, year in and year out, day and night, link together the beautiful motherland and their own destinies; physically they are on the frontiers, but their hearts are full of the beautiful fields of their home areas. Listen again to the poet's song:

The frontiers of the motherland, the home areas of the fighters,  
Youth grows to maturity with the Four Modernizations...



Squad leader Xiong Chengfu stands fast at his post, lets nothing questionable escape him

# 天山深处战士家



The Tianshan radar station, the "1,000-11 eyes" of the motherland



(3)

Caption 3. When a fighter is sick, the political officer kindly looks after him



(4)

Caption 4. Water truck sent by the upper levels relieved the drinking water problems of the companies



(5)

Caption 5. Grazing their own animals to improve their livelihood



(6)

Caption 6. Grinding the soybean paste well in preparation for the fighters' next day meal



The hearty sound of laughter on the ball court reverberates in the snow  
and ice covered mountains and valleys

CSO: 4005/557

## MILITARY AND PUBLIC SECURITY

### SQUAD PRACTICES SHOULDER-FIRING OF RECOILLESS RIFLE

Beijing JIEFANGJUN HUABAO (LIBERATION ARMY PICTORIAL) in Chinese No 3, 1981  
pp 14-15

[Report by Li Yongan [2621 3057 1344] and Long Yongxiang [1690 3057 4382]:  
"Acquiring Proficient Training in Peacetime Makes It Possible To Overcome  
Difficulties in Wartime"]

[Text] When we went to the artillery company of a certain unit of the Guangxi border defense units to cover a story, Zhang Nan [1728 0389], the company's political instructor, pointed to a group photograph of the company's 10th Squad taken during the war of the self-defense counterattack against Vietnam and excitedly gave us an account of the battle scene at that time. On the morning of 2 March 1979, the 10th Squad was following the infantry in pushing forward toward large and small rocky hills on the northwest side of Long Son when it discovered an enemy tank fleeing along the road in the direction of a large rocky hill. At that time I was a platoon leader, and I led the 10th Squad to close in on the right rear of the enemy tank. A wrecked car was lying across the road, so the enemy tank gradually slowed its speed. The 10th Squad, taking advantage of this favorable opportunity and disregarding the raking fire from the tank's machinegun, rushed forward into a pit. As they were only a little over 20 meters from the enemy tank, it was impossible to mount their recoilless rifle and fire at the tank. Squad leader Yu Xiangzhou [0151 3276 5297], fighting bravely in the van with the spirit of crushing all enemies, took from a gunner the 82-mm recoilless rifle and fired it from a standing position with its barrel resting on his shoulder. With a tremendous roar, the enemy "tortoiseshell" burst into flames. Next, they destroyed an enemy armored car, giving strong support to the infantry battle. Just when the fighters of the 10th Squad, full of pride and enthusiasm, were standing on the wreckage of the enemy tank, a war correspondent took this unforgettable photograph of them.

"This photograph records the battle merits of the 10th Squad and also preserves a valuable combat experience." After the political instructor briefed us on the origin of this photo, he said with deep feeling, "Actual warfare produces genuine knowledge and wisdom. From this battle, the fighters of the 10th Squad have realized that firing a recoilless rifle from

the shoulder is a method not limited by terrain or surface features. In capturing an objective, pursuing and attacking the enemy, and shifting positions, it is a fairly fast method, and its usefulness during combat is great." Presently led by Yu Xiangshou, the 10th Squad is integrating its experiences in actual warfare, further grasping basic training and studying all sorts of ways to practice firing the recoilless rifle from the shoulder. Some rest the barrel on a tree trunk or a tree fork to support the recoilless rifle when they practice this method; others use pits or building corners as supports in practicing this method of firing. They also select all sorts of complex terrain to practice the techniques of rapidly mounting the recoilless rifle or of putting it into position. In conclusion, the political instructor said to us, actual warfare proves basic training is the prerequisite for applied training. Only by considering in peacetime the most difficult situations and doing a lot of training in several basic skills can we meet the contingencies of wartime, be resourceful and decisive in battle, and complete our combat mission.

CSO: 4005/557

## MILITARY AND PUBLIC SECURITY

### PILOTS TRAIN IN FLYING ON RAINY NIGHTS

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 3, 1981  
pp 16-18

[Report by Tian Dexin [1944 1795 1800], Xu Jiekang [6079 0094 1660] and  
Wu Shouzhong [0702 1108 8369]: "Honing Skills in the Vast Sky--Nighttime  
Flight Training Under Rainy Conditions"]

[Text] Night, deep blackness and boundless, muffled rain.

The airfield was completely shrouded by the curtain of night. In front of the mountain, wind and rain; in back, thunder and lightning lay in ambush. The limitless night sky was full of hardships and dangers. Precisely in this wretched weather, a certain regiment of the air arm carried out nighttime flight training under rainy conditions.

Keeping a flight course on a rainy night is extremely difficult. The young pilots say. True gold is tempered by fire, and the people's fighters must meet difficulties head-on. They neither underestimate the weather and blindly take chances nor fear it, stop and go no further, but value science and train hard under the prerequisite of nighttime basic training in order to do well in applied training. Dadui Commander Lin Xinman [0491 2450 3361] in leading the pilots during basic training, asked that all of them memorize perfectly the several dozen instruments and the nearly 100 switches and knobs in the cockpit so that they would know them like the palms of their hands. He also guided their study of aeronautical theory so as to grasp the essentials of nighttime flying under rainy conditions. In order to correct some movements that different flyers were inclined to make, Liu Xinman personally led them on a night flight under rainy conditions. On the airfield on a rainy night, aircraft engines roared into life. The young pilots at the controls of their "flying eagles," meeting the wind and rain, rushed into the night sky as swiftly as wind and as quickly as lightning. This battalion made full use of weather conditions to become proficient in flight training. In 10 days, they flew nearly 100 sorties on 7 flight missions, with all the pilots struggling to attain the goal of being "all-weather" pilots. For the sake of flying safety, the ground personnel, also braving wind and rain, train hard at basic skills at the airfield. The

bright pupils of their eyes piercing through the dense rain, they look at every part of the aircraft; the rays of their flashlights open the curtain of night as they are directed toward every doubtful point; the radar sited on the side of the runway, with its fluorescent glow, immediately points out the flight route for their returning comrades in arms; the meteorological installation towering aloft on a low hill keeps close watch on the changing weather situation; the searchlights on the apron illuminate the runway with their gigantic rays stabbing through the rain. The ground cadres and fighters labor assiduously to ensure that their comrades in arms are successful during nighttime flight training under rainy conditions.

An airfield that conducts flights on rainy nights is a good classroom for both basic and applied training. It sharpens combat skills and fosters a generation of skilled air and ground personnel of the air arm.



The airfield on a rainy night



Moving onto the airfield in spite of rain to undergo intense training



(3)

Caption 3. Undergoing rigorous training aboard the aircraft and doing skillful flying in the air to resolutely become trained as an "aerial night tiger."



(4)

Caption 4. Deputy Regimental Commander Zhang Kairong [1728 7030 2837] (right) and machinist Chen Shengfa [7115 0524 4099] making a detailed parts check before take-off

## MILITARY AND PUBLIC SECURITY

### ENGINEERS THROW PONTOON BRIDGE ACROSS ICEBOUND RIVER

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 3, 1981  
pp 30-31

[Report by Ou Dalong [2962 6671 7893] and Cao Dongsheng [2580 2639 0581]:  
"Breaking Ice To Erect a Pontoon Bridge"]

[Text] On the icebound, snow-covered Songhua River. The commanders and fighters of a certain pontoon bridge regiment of the engineering corps of the Shenyang Units, braving wind, snow and severe cold, were training to breaking ice and erect a pontoon bridge.

This exercise was carried out by the method of combining manpower, machinery and demolition. In a temperature more than 30 degrees below zero, regimental commander Tian Hongju [3944 3163 5282], together with his cadres and fighters, pulled steel and rope cables to remove ice with punt-poles. Sweat shone through their uniforms, icy water splashed on their bodies, and their hands and feet were numb with cold, but they heroically said, For the sake of combat readiness, this little suffering does not amount to anything! The fighters with skillful techniques used ice-breaking machinery and motorized machinery to cut a groove through the ice on the river. After detonating an explosion on the ice layer, icicles more than 3 meters high bobbed above the river. Big and small icebergs floated on the surface, some more than 5 meters long and over 3 meters wide. It would take a lot of doing to push these big icebergs under the layer of ice. The commanders and fighters, displaying our army's spirit of bearing hardship and standing hard work, with ice borers, hooks and poles, and with difficulty pushed all these icebergs under the water. After the channel had been opened, fighters of the pontoon bridge company with lightning speed mounted the iron pontoons, and each, according to the division of the labor, tightly connected the pontoons, trusses and roadbed planks. The connectors and hookers coordinated their work closely, and the operators on the point-shaped pontoons and the square-shaped pontoons mutually supported each other. There was a bustling scene of activity in which each person tried to overtake the other in friendly emulation and in which they made every second and minute count. After arduous struggle, a heavy-duty pontoon bridge was successfully thrown across the river, and the commanders and fighters were especially happy when they saw all kinds of artillery and vehicles smoothly cross the bridge.



(1)

(2)

Caption 1. Making concerted efforts to do the work of building the dock

Caption 2. Regimental Commander Tian Hongju [3944 3163 5282] steps into the ice trench to explain the method of breaking ice



Removing a block of ice to open a water lane



Various types of vehicles and artillery pieces crossing the heavy pontoon bridge



Using a newly developed ice breaker to cut through the ice



提升进入航道，连接门桥。

Pontoon being placed in the water lane to be connected

## MILITARY AND PUBLIC SECURITY

### SINGLE-CHANNEL CARRIER REPEATER DESCRIBED

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 3, 1981  
p 42

[Column: "Innovations"]

[Text] Zhou Xinglong [6650 5281 7127], repair section chief of a signal battalion of an unidentified unit of the Lanzhou Units, has successfully improved a single-channel self-operating carrier repeater. The improved repeater is compact, light and can increase the volume of long-distance communications, which meets the needs of units engaged in war preparedness.



Caption 1. Zhou Xinglong checking the single-channel self-operating carrier repeater [top right]

Caption 2. The structure of the single-channel self-operating carrier repeater [center]

Caption 3. Conducting a communications test in the field

**END OF**

**FICHE**

**DATE FILMED**

May 6, 1981